

Notice of Allowability	Application No.	Applicant(s)	
	09/659,194	MARCHOK ET AL.	
	Examiner	Art Unit	
	Phuongchau Ba Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE 1-13-05.
2. ☒ The allowed claim(s) is/are 31-37, 41, 38-40, 42-44, 50-53, 54-56, 60, 57-59, 61-63, 68-74, 78, 75-77, 79-81; Renumbered as 1-42 respectively.
3. ☒ The drawings filed on 11 September 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Regarding claims 31-44, the prior art fails to teach or suggest in a communication system, a method of generating a digital output data stream for subsequent digital to analog conversion to carrier signals having a plurality of frequency bins, the method comprising "accumulating the digital data points associated with one or more of the frequency bins, wherein the carrier signals comprise at least a first carrier signal having a first frequency and carrying a first subsymbol and a second carrier signal having a second frequency and carrying a second subsymbol, wherein the input data stream comprises input digital first data and input digital second data, and wherein the generating digital subsymbols comprises generating a digital form of the first carrier signal carrying the first subsymbol in response to the first data and generating a digital form of the second carrier signal carrying the second subsymbol in response to the second data," in combination with other limitations, as specified in the independent claim 31.

Regarding claims 50-63, the prior art fails to teach or suggest in a communication system, apparatus for generating a digital output data stream for subsequent digital to analog conversion to carrier signals having a plurality of frequency bins, the apparatus comprising "means for accumulating the digital data points associated with one or more of frequency bins, wherein the carrier signals comprise at least a first carrier signal having a first frequency and carrying a first subsymbol and a second carrier signal having a second frequency and carrying a second subsymbol, wherein the input data

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stream comprises input digital first data and input digital second data, and wherein the means for generating digital subsymbols comprises means for generating a digital form of the first carrier signal carrying the first subsymbol in response to the first data and for generating a digital form of the second carrier signal carrying the second subsymbol in response to the second data," in combination with other limitations, as specified in the independent claim 50.

Regarding claims 68-81, the prior art fails to teach or suggest in communication system, apparatus for generating a digital output data stream for subsequent digital to analog conversion to carrier signals having a plurality of frequency bins, the apparatus comprising "an accumulating circuit for accumulating the digital data points associated with one or more of the frequency bins, wherein the carrier signals comprise at least a first carrier signal having a first frequency and carrying a first subsymbol and a second carrier signal having a second frequency and carrying a second subsymbol, wherein the input data stream comprises input digital first data and input digital second data, and wherein the first generating circuit comprises a circuit for generating a digital form of the first carrier signal carrying the first subsymbol in response to the first data and for generating a digital form of the second carrier signal carrying the second subsymbol in response to the second data," in combination with other limitations, as specified in the independent claim 68.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUCHO
PRIMARY EXAMINER

Duchetto
2-18-05

PN
Phuongchau Ba Nguyen
Examiner
Art Unit 2665